

ABSTRACT OF THE INVENTION

Apparatus and method for rotationally immobilizing a hub on a rotatable shaft. A portion of the shaft is cylindrical and has a first diameter. The hub has a cylindrical axial bore having a second diameter larger than the diameter of the shaft. At least one axially-extending keyway is provided in the surface of the shaft. When the shaft is inserted into the hub bore, the hub is free to rotate upon the shaft. To immobilize the hub rotationally with respect to the shaft, at least one tapered key having a height greater than the maximum depth of the at least one keyway is inserted axially into the at least one keyway. Preferably, the at least one key is inserted along the at least one keyway to a point at which the maximum height of the at least one key is positioned at the axial midpoint of the hub bore. Preferably, the hub is formed of a deformable material and the at least one key is formed of a harder material and is provided with at least one relatively sharp edge such that the at least one key incises the hub bore as it moves along the at least one keyway, thus rigidly locking the hub to the shaft. The invention is especially useful in indexing a throttle position sensor to a throttle shaft.